W. Fairbairn
Fairbairn

The Polygon Sunday
Nov. 12th - 1854

My Dear Sir

I shall have great
pleasure in joining my
old and respected friend
Mr. Tierney at your dinner
table on Tuesday next
but if not asking too
much in which I am
joined by Mrs. Tierney we
could wish you to give
us dinner — if not in-
-convenient — a little
earlier as I must

leave at ½ past six
leaving a paper to read
at the Society at seven
the same Evening.

Mr Tenney has requested
a week to be present
and I hope you will
not consider our leaving
so soon as at all
disrespectful to your
kind hospitality.

Yours,
My Dear Sir
Yours respectfully
W. F. Williams

Manchester Dec. 2nd
1872

My dear Mr Lesspoe

However much I admire Mr Swain as a Poet and a friend. I am unfortunately constrained to limit my subscription to £25— as my funds are not large and of late they have been drawn upon by ~~with~~ Instructions home time and in London to an extent that has made me poor indeed. Besides, I am again in for another Lecture for Owens College.

Ever yours faithfully

Sir W Fairbairn

Engineer & Mauritius

DSI

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THE GREAT INDUSTRIAL EXHIBITION OF 1853.

(In connexion with the Royal Dublin Society,)

Offices, 3, Upper Merrion-street,

Dublin, _____ 185__

In order to secure the
Receipt
^ Title of the Wood Lawn Garden
for supporting the Gallia
meas tested in the Presence
of _____ with
a Load of 22 tons equally
distributed over the Surface. With the
Load they gave a deflec
tion of 1 10/16 inches in
the middle and on Re-
moving the Load they
Restored themselves to
within 9/16 of their Origi-
nal position giving
a Permanent Set of that
amount. The extreme

loud that they will
be called upon to bear
will be 4 tons, so that there
is a margin of strength
equal to eight tons
the greatest load. —

Manchester June 6th 1867

Sir

In reply to yours of the 2d
I am inclined to think in the
present state of transition of
our Iron Manufacture that
the Puddling furnace may in
most cases be entirely dispensed
with and that almost any de-
scription of iron will be made
direct from the oxide pig iron
if not ultimately from the
smelting furnace. No doubt,
as long as the puddling system
exist, your process of continu-
-ing the Bloom will
be highly valuable in consolida-
-ting the Mass and will produce
a superior quality of iron
but I much fear the process
would be costly the only advan-
-tage being the retention of heat
during the whole of the process.
I should be glad the system
you recommend in operation
and in hopes of that pleasure
I am Sir
Yours sincerely
W Fairbairn

H. W. Fauman Esqr

ISO

Manchester Jany 8th 1873

Dear Sir

I beg to enclose a cheque
value £20 — the amount of my
Subscription to Mr Swain the
Poets Memorial. Please to acknow
-ledge receipt and Believe me

Yours faithfully

W Fairbairn

Alex^r Ireland Esq^r

DSI

THE LATE SIR WILLIAM FAIRBAIRN, F.R.S. Aug 18 1874

Sir William Fairbairn, the eminent engineer, of Manchester, died at 1 o'clock yesterday, in his 83d year, at Moor-park, Farnham, Surrey, where he had been staying during the past month in the hope of benefiting his declining health. A friend and fellow worker with the Stephensons, it is almost needless to state here that no name stood higher than that of Fairbairn in the world of civil engineering, and that though late in life he accepted a well-earned title, his reputation hereafter will date from a generation at least earlier than his patent as a baronet. The son of a plain man of the middle class, a Mr. Andrew Fairbairn, of Smailholm, he was born at Kelso, in Roxburghshire, in the early part of the year 1789, and received his education as a boy at a small school at Mullochy, in Ross-shire, ssubsequently acquiring a more strictly professional training at Newcastle-on-Tyne. Apprenticed to an enginewright at Percy Main Colliery, he employed his evenings in the study of geometry and mechanics, and it is recorded in a sketch in the *Imperial Dictionary of Biography* that on the termination of his apprenticeship he came to London, where he was employed for two years as a journeyman mechanic, and that he subseqently set out on a tour through the North of England, Wales, and part of Ireland, for the purpose of seeing the practical application of the principles which he had so carefully studied, but supporting himself by work through the whole of his travels. He appears to have settled at Manchester in 1817, according to the account already quoted, without capital or connexion; but if we may trust the *English Cyclopædia*, in partnership with a Mr. Lillie, in conjunction with whom his name rose to become that of one of the leading firms among the machine makers of that city. At first he had an up-hill battle to fight, but by firmness and energy he conquered all difficulties and rose steadily, if not rapidly, into an independent position. In the course of his early practice he originated many improvements in Mill work, which have since been generally adopted, and with beneficial results; but the minute description of these would, perhaps, be too technical for the general reader. Mr. Fairbairn acted in conjunction with Robert Stephenson in the planning and execution of the celebrated Britannia and Conway tubular railway bridges across the Menai Straits. In this great work his wide practical as well as theoretical knowledge of wrought and cast iron as materials, and of the form in which they could be made available for bearing the strain of heavy weights, pointed out Mr. Fairbairn as one of the authorities to be consulted. The relative portions of the merit of these triumphs of engineering skill, which were due to Stephenson and to Fairbairn respectively, became in the end the subject of a controversy in which much was written on both sides, and which it would be foreign to our purpose and our wish to revive. It is more to the point to observe that the experience gathered here has since contributed largely to the present extensive use of iron in naval architecture. For the use of that material in shipbuilding Mr. Fairbairn was a constant advocate, at all events since the year 1850, when he published in the Philosophical Transactions of the Royal Society his "Experimental inquiry into the strength of wrought-iron plates and their riveted joints, as applied to shipbuilding and to vessels exposed to severe strains." To him also we owe many useful researches into the causes of explosions in steam boilers—a subject upon which he has given evidence and delivered lectures full of the most important information, because it is the result of practical observation. He collected several of his lectures on these and kindred subjects, and gave them to the world under the title of *Useful Information for Engineers*, which has reached, at all events, three series. He was also the author of works on the "Britannia and Conway Bridges," and on the "Application of Coal and Wrought Iron Beams to Floors and Bridges." He was a Fellow of the Royal Society, a Corresponding Member of the French Institute, an active or honorary member of almost every society connected with engineering science in this country, and of many foreign philosophical societies; and had received medals or other marks of recognition for his services to science from most of the Crowned Heads of Europe. He several times acted as President of the Mechanical Section of the British Association for the Advancement of Science; was a member of the jury of the Mechanical Department of the Great Exhibition of 1851, and acted as President of the Jury of the corresponding section of the Exhibition of Industry at Paris in 1855. He was created a Baronet at the recommendation of Mr. Gladstone, in 1869. The greater part of Sir William Fairbairn's acknowledged publications appeared in the Philosophical Transactions of the Royal Society, in the Reports of the British Association, and in the Transactions of the Philosophical Society of Manchester, in which he filled the chair at Dalton. Some of his works, however, were also published separately. Among his chief productions we may specify treatises on *Canal Navigation*, on the *Strength and other Properties of Hot and Cold Blast Iron*, on the *Strength of Locomotive Boilers*, on the *Strength of Iron at Different Temperatures*, on the *Effect of Repeated Melting upon the Strength of Cast Iron*, on the *Irons of Great Britain*, on the *Strength of Iron Plates and Riveted Joints*, on the *Application of Iron to Building Purposes in General*, &c.

It only remains for us to add that Sir William Fairbairn married, in 1816, Dorothy, daughter of Mr. John Marr, of Morpeth, Northumberland, by whom he had a family of seven sons and one daughter. His eldest surviving son, Thomas, who now succeeds as second baronet, was born in 1823, and married, in 1848, the second daughter of the late Mr. Thomas Callaway, of Chiselhurst, Kent. He is well known as having been the President of the Exhibition of the Art Treasures of the United Kingdom held at Manchester, in 1857. On the occasion of Her Majesty's visit to that Exhibition in June of that year, he was offered the honour of a knighthood, which he declined. He was one of Her Majesty's Commissioners for the Great Exhibition of 1851, and again took an active part in the organization of the second Great Exhibition of 1862, in the same capacity.

DEATH OF SIR WM. FAIRBAIRN, BART., F.R.S. Aug 18 1874

The death is announced of Sir William Fairbairn, Bart., F.R.S., the eminent engineer of Manchester, which took place yesterday, at Moor Park, Farnham, Surrey.

on its election it met for a preliminary discussion of ways and means. A programme was drawn up for the next day, the order of the State breakfast was settled, and the official toasts to be drunk, but no resolutions could assume an authoritative character until His Majesty should arrive, as nothing was known as yet with regard to his travelling plans after his return from the Geysers. In the meantime the tents wherein His Majesty was to be entertained were closed to the public, and the superintendents of the decorative arrangement had the whole of the State tents handed over to their undisputed authority. Thus passed the afternoon and the evening of the 5th of August, 1874. It was a pretty sight to watch the tents, now becoming more numerous every hour, and representing a canvas village along the clear waters of the Öxará, the cavalcades emerging one after the other out of the great rift, the black walls of the Almannagjá intensifying the subdued twilight at 11 o'clock, which lay in a heavy calm on the fields, while away to the south there lay the vast silver sheet of the lake.

In the morning of the 6th of August the National Meeting sat at 8, and various measures of national importance were discussed, among which was a national subscription for a steamer to be employed in coasting communication round the country, a national elementary school system, and several other measures. As the discussion on these matters could only assume the form of a preliminary exchange of general ideas with regard to the projects, nothing could be done except to adopt measures for further investigation. In the meanwhile the committee of arrangements went on with their work, evidently bent upon leaving no stone unturned to insure that the reception of His Majesty at Thingvalla should be as hearty as the small means for display at hand would admit of. In order to insure order and propriety on the fields, the committee secured the assistance of 12 of the briskest students and graduates of Reykjavik to do service as special constables under the direction of the various magistrates present, who volunteered to lend their authority to the decrees of the committee. It was settled that the national fête should begin at 5 o'clock in the afternoon. Meantime, while the committee of arrangements was thus busy outside, the National Meeting was no less busy with a variety of national measures, the list of which terminated in the adoption by loud acclamation of a resolution proposing to send to Jon Sigurdsson, who may fairly be called the national hero, though the sword he has fought with has not been one of steel, an address conveying the thanks of his nation for the marvellous skill, endurance, and moderation with which for upwards of 20 years he had conducted the hard-fought political contest with Denmark. When the mover of the resolution said that it was only owing to Sigurdsson's genius, patriotism, and moderation that this people could lift a hopeful brow with regard to the future, the cheering from the crowd showed that was not doubtful what place Jon Sigurdsson occupied in the heart of its people.

As the time for the commencement of the national fête and the King's arrival was fast approaching, it was resolved by the managing committee to send out the "heralds"—so were the academical constables called for the nonce—to order the people to gather up behind their tents, out of sight from the road, all unsightly display of travelling paraphernalia and the domestic appointments of their tents; all horses were to be removed from the fields, and all the people were to proceed to the tribune at five minutes to 5 to hear the President of the National Meeting formally open the festival. All these arrangements were received by the people with ready compliance. At about 2 o'clock the committee had sent 12 of the handsomest yeomen of the country present at the meeting to ride about two miles to the eastward to meet His Majesty coming in from the Geysers and to ask him to allow the assembled people at Thingvalla to greet him on entering the fields; care being taken to detain His Majesty, weary with a long day's travelling, as little as possible. These "bonders" further were ordered by the committee to ask His Majesty to accept their escort back to Thingvalla. About 4 o'clock news came of the probable arrival of the King about 6 o'clock in the evening, and consequently people prepared to go on with the programme for the day. At 5 exactly the fête was opened in a short announcement from the tribune by Mr. Fridriksson, and presently the messenger who had been sent to ascertain the movements of His Majesty returned with the message that he might be expected in half-an-hour. All the people present at Thingvalla were arranged on both sides of the road by which His Majesty was to pass, in a thick file, some 20 deep or more, and on the slope of the southern wall of the Almannagjá the women were stationed with their white kerchiefs to wave their welcome to His Majesty. Close to the road on the left, a little in front of the spot where His Majesty was to stop to listen to the address of welcome, were stationed 24 young maidens in Icelandic dress, with flowers ready to strew in His Majesty's path as soon as he should move on after the greeting. Presently the Royal cavalcade made its appearance, and, according to instructions, the escort of twelve, when they reached the spot where His Majesty was to stop, moved out of the road, six to either side, and turned their horses' heads towards the King as he passed in between them. As soon as Mr. Fridriksson had bidden His Majesty welcome in a few words, the ringing cheers of the crowd re-echoed along the walls and created a considerable amount of confusion among the King's following, many of whom were unseated, while His Majesty himself, riding on one of the most spirited ponies in the country, so managed the frightened animal as not only to sit with perfect ease in the saddle but to be able to bend gracefully to the crowd as he passed along—a feat which created many admiring comments from the horsemen present. Then the Committee of Management had an interview with the King, inviting him to breakfast the following day at 11 o'clock, which His Majesty gracefully accepted.

Friday, the 7th of August, dawned heavy and pregnant with cloud and rain. It was evident that the programme, which was to fill up all the afternoon with rapid succession of festive displays, would have to

Nobility	5	10	7	Elmina	3	9	11
Cincinnati	4	10	5	Cutty	3	9	7
Wild Murtagh	3	10	4	Bullfinch	3	9	6
Perotes	3	10	4	Old Fashion	3	9	4
Prescot	4	10	3	Rock Rose	3	8	11
Tormentor	6	10	1	Vanquisher	3	8	10
Mineralogy	3	10	0				

Weights published August 18, at 9 a.m.

CRICKET.

St. Peter's Cricket Club v. Alleyne House [illegible]

140 **Fairbairn (William,** *Civil Engineer*, 1789-1874) AUTOGRAPH LETTER signed, to H. W. Fanum ?" from *Manchester, January 6th* 1867, 2 *pages*, 8vo, detailed technical letter **£16**

"I am inclined to think in the present state of transition of our Iron Manufacture that the Puddling furnace may in most cases be entirely dispensed with and that almost any description of iron will be made direct from the crude pig iron if not ultimately from the smelting furnace".

Edwards - 73

the Editor of the *Sphere* which was sent accompanying the poem (". . . a War Poem, about 80 lines, which I hope will meet with your approval"), and another page on which Flecker has given directions for payment etc. (". . . the author would prefer to reserve the right of publishing the poem in broadsheet a month after its appearance in a periodical").
With the original envelope (unstamped) addressed to Clement Shorter, Editor of the *Sphere*.